

In the following, special emphasis is placed on the differences between the two species.

#### Nest, pavilion, and colony structure

Despite of our intensive search in several colonies, and in contrast to the conditions found in *P. arachne*, no nest was detected in culms of bamboo. In one colony which was collected as a whole a single queen was found inside a large pavilion (24 cm long) together with 196 workers, all stages of brood except pupae, and 60 Pseudococcidae. So this pavilion had to be classified as the nest of the colony. The total number of adults in this colony was 1 queen, 9.192 workers, 81 alate females, and 25 males.

The colony occupied 263 pavilions at two, small bamboo plants (each 1.70 m high, and 4 m crown diameter), about 2 m apart from each other and separated by low grass vegetation. Other colonies lived on much larger bamboo plants (10-15 m high) and their colony sizes may have been larger.

The pavilions were varying in length from 4.5-30.0 cm (median = 17.3 cm,  $\bar{\sigma}$  = 17.1 cm, s = 5.3 cm, n = 42) and in width from 1.0-2.5 cm (median = 1.9 cm,  $\bar{\sigma}$  = 1.9 cm, s = 0.4 cm). They occupied the whole leaf or only its proximal two thirds. A pavilion normally had 2 entrances, one at its proximal and one at its distal end. A refuse pile was usually present near the latter. The pavilions contained 7-85 workers (median = 34,  $\bar{\sigma}$  = 41.6, s = 23.8). During the study time (December to February) females or males occurred only rarely in the pavilions (females : median = 0,  $\bar{\sigma}$  = 0.2, s = 0.7 ; median = 0,  $\bar{\sigma}$  = 0.1, s = 0.3). Pupae numbered from 0-6 per pavilion (median = 0,  $\bar{\sigma}$  = 0.7, s = 1.3), large and medium sized larvae from 0-12 (median = 1,  $\bar{\sigma}$  = 3.1, s = 4.1). Small larvae (occurring clustered in large numbers in 8 % of the pavilions) and eggs were not counted.

#### Weaving behaviour and pavilion building

The most striking difference to *P. arachne* was the mode of pavilion construction : *P. hodgsoni* built its pavilions in longitudinally folded or rolled leaves of broad-leaved bamboo, where the upper side of the leaf formed the interior of the pavilion. Only the small slit between the leaf's edges (normally 1 mm, but up to 1 cm at the ends of the pavilion) was closed with silk and covered with very fine material gnawed off from dry parts of culms and leaves.

In contrast to the conditions in *Oecophylla* species (HÖLDOBLER and WILSON, 1977), the leaves were not actively manipulated. Instead, the ants spun together the edges of a leaf when these happened to move towards each other due to turgor changes resulting from heavy insolation. When a "foraging" worker discovered such a leaf, it immediately recruited nestmates to the site. During several observations, up to 20 workers arrived, up to 5 of